

Form PTO-1449		Docket Number (Optional) BIV-052.02(21459-5202)		Application Number 09/435,733		
<b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> <small>(Use several sheets if necessary)</small>		Applicant <b>Galdes et al.</b>				
		Filing Date <b>November 8, 1999</b>		Group Art Unit <b>1646</b>		
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<b>FOREIGN PATENT DOCUMENTS</b>						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES      NO
<i>MB</i>	HQ WO 95/18856	07/13/95	PCT			X
<i>MB</i>	HR WO 99/ 29854	06/17/99	PCT			X
<b>OTHER DOCUMENTS</b>						<small>(Including Author, Title, Date, Pertinent Pages, Etc.)</small>
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1646**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
WJ	AA 4,456,687	06/26/84	Green	435	241	12/01/80
	AB 5,223,408	06/29/93	Goeddel et al.	435	69.3	07/11/91
	AC 5,585,087	12/17/96	Lustig et al.	424	9.2	06/08/94
	AD 5,643,915	07/01/97	Andrulis, Jr. et al.	514	279	06/06/95
	AE 5,747,507	05/05/98	Ikegaki et al.	514	312	08/10/93
	AF 5,759,811	06/02/98	Epstein et al.	435	69.1	11/13/96
	AG 5,789,543	08/04/98	Ingham et al.	530	350	12/30/93
	AH 5,837,538	11/17/98	Scott et al.	435	325	10/06/95
	AI 5,844,079	12/01/98	Ingham et al.	530	350	12/14/94

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
WJ	AJ WO 90/02809	3/22/90	PCT	C 12P	21/00		
	AK WO 92/15679	9/17/92	PCT	C 12N	15/10		
	AL WO 94/28016	12/08/94	PCT	C 07K	13/00		
	AM WO 95/23223	08/31/95	PCT	C 12N	15/00		
	AN WO 96/ 09806	04/04/96	PCT				
	AO WO 96/11260	04/18/96	PCT	C 12N	5/00		
	AP WO 96/16668	06/06/96	PCT	A 61K	38/17		
	AQ WO 96/17924	06/13/96	PCT	C 12N			
	AR WO 97/11095	03/27/97	PCT	C 07K	14/475		
	AS WO 97/45541	12/04/97	PCT	C 12N	15/12		
	AT WO 98/12326	03/26/98	PCT	C 12N	15/12		
	AU WO 98/14475	04/09/98	PCT	C 07K	14/47		
	AV WO 98/21227	05/22/98	PCT	C 07H	21/04		
	AW WO 98/30234	07/16/98	PCT	A 61K	38/18		
	AX WO 98/30576	07/16/98	PCT	C 07K	1/100		
	AY WO 98/35020	08/13/98	PCT	C 12N	5/00		
	AZ WO 99/00117	01/07/99	PCT	A 61K	31/00		
	BA WO 99/00403	01/07/99	PCT	C 07H	21/02		

BB	WO 99/01468	01/14/	PCT	C 0			
BS	WO 99/10004	03/04/99	PCT	A 61K	38/00		
BD	WO 99/04775	02/04/99	PCT	A 61K	31/00		
BE	EP 0187 371 A2	07/16/86	European Patent Application				
BF	EP 0249 873 A2	06/10/87	European Patent Application				
BG	EP 0879888 A2	11/25/98	European Patent Application	C 12N	15/12		
BH	EP 0874048 A2	10/28/98	European Patent Application	C 12N	15/12		
BI	JP 63 08 81 12		Japan				
BJ	JP 02 27 36 10		Japan				
BK	JP 04 30 55 28		Japan				

# OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

BL	Anderson, R. et al., "Maintenance of ZPA signaling in cultured mouse limb bud cells", <i>Devel.</i> <b>117</b> :1421-1433 (1993).						
BM	Angier, N., " Biologists find key genes that shape patterning of embryos", <i>New York Times</i> , Jan. 11, 1994, C-1.						
BN	Apfel, S. et al., "Nerve Growth Factor Prevents Toxic Neuropathy in Mice", <i>Ann. Neurol.</i> , 29 : 87-90 (1991).						
BO	Apfel, S. et al., "Nerve Growth Factor Prevents Experimental Cisplatin Neuropathy ", <i>Ann. Neurol.</i> 31 : 76-80 (1992 ).						
BP	Basler, K. and G. Struhl, "Compartment boundaries and the control of <i>Drosophila</i> limb pattern by Hedgehog protein", <i>Nature</i> <b>368</b> :208-214 (1994).						
BQ	Basler, K. et al., "Control of cell pattern in the neural tube: Regulation of cell differentiation by <i>dorsalin-1</i> , a novel TGFβ family member", <i>Cell</i> <b>73</b> :687-702 (1993).						
BR	Bass, S. et al., "Hormone phage: An enrichment method for variant proteins with altered binding properties", <i>PROTEINS: Structure, Function, and Genetics</i> <b>8</b> :309-314 (1990).						
BS	Bejsovec, A. and E. Wieschaus, "Segment polarity gene interactions modulate epidermal patterning in <i>Drosophila</i> embryos", <i>Development</i> <b>119</b> :501-517 (1993).						
BT	Bienz, M., "Homeotic genes and positional signalling in the <i>Drosophila</i> viscera", <i>TIG</i> <b>10</b> :22-26 (Jan. 1994).						
BU	Bitgood, M. and A. McMahon, "Hedgehog and Bmp genes are coexpressed at many diverse sites of cell-cell interaction in the mouse embryo", <i>Dev. Biol.</i> <b>172</b> (1):126-138 (1995).						
BV	Blair, S. S., "Hedgehog digs up an old friend ", <i>Nature</i> , <b>373</b> :656-657 (23 Feb. 1995).						
BW	Brand-Saber, B. et al., "The ventralizing effect of the notochord on somite differentiation in chick embryos", <i>Anat. Embryol.</i> <b>188</b> :239-245 (1993).						
BX	Brockes, J., "We may not have a morphogen", <i>Nature</i> <b>350</b> :15 (1991).						
BY	Bumcrot, D. A. et al., "Proteolytic processing yields two secreted forms of sonic hedgehog", <i>Mol. Cell. Biol.</i> <b>15</b> (4):2294-2303 (April 1995).						
BZ	Bumcrot, D. A. and A. McMahon, "Sonic hedgehog: Making the gradient", <i>Chem. Biol.</i> <b>3</b> (1):13-16 (Jan 1996).						
CA	Bumcrot, D. A. and A. McMahon, "Somite differentiation. Sonic signals somites", <i>Curr. Biol.</i> <b>5</b> (6):612-614 (June 1995).						
CB	Charité, J. et al., "Ectopic expression of <i>Hoxb-8</i> causes duplication of the ZPA in the forelimb and homeotic transformation of axial structures", <i>Cell</i> <b>78</b> :589-601 (1994).						

CC	Coffman, et al., "Xotch, the X homolog of Drosophila notch", <i>Science</i> <u>249</u> :1438 (1990).
CD	Concordet, J. and P. Ingham, "Developmental biology. Patterning goes sonic", <i>Nature</i> <u>375</u> (6529):279-280 (May 1995).
CE	Curry, et al., "Sequence analysis reveals homology between two proteins of the flagellar radial spoke", <i>Mol. Cell. Biol.</i> <u>12</u> :3967-3977 (1992).
CF	Davidson, E. H., "How embryos work: a comparative view of diverse modes of cell fate specification", <i>Develop.</i> <u>108</u> :365-389 (1990).
CG	Davis, A. P. and M. R. Capecchi, "Axial homeosis and appendicular skeleton defects in mice with a targeted disruption of <i>hoxd-1</i> ", <i>Devel.</i> <u>120</u> :2187-2198 (1994).
CH	Dickinson, W., "Molecules and morphology: Where's the homology", <i>TIG</i> <u>11</u> (4):119-120 (1995).
CI	Dingemans, M. A. et al., "The expression of liver-specific genes within rat embryonic hepatocytes is a discontinuous process", <i>Differentiation</i> <u>56</u> :153-162 (1994).
CJ	Dollé, P. et al., "Coordinate expression of the murine <i>Hox-5</i> complex homeobox-containing genes during limb pattern formation", <i>Nature</i> <u>342</u> :767-772 (1989).
CK	Dollé, P. et al., "Disruption of the <i>Hoxd-13</i> gene induces localized heterochrony leading to mice with neotenic limbs", <i>Cell</i> <u>75</u> :431-441 (1993).
CL	Echelard, Y. et al., "Sonic hedgehog, a member of a family of putative signaling molecules, is implicated in the regulation of CNS polarity", <i>Cell</i> <u>75</u> :1417-1430 (1993).
CM	Egger, S. et al., "Distinct expression and shared activities of members of the hedgehog gene family of <i>Xenopus laevis</i> ", <i>Devel.</i> <u>121</u> (8):2337-2347 (Aug. 1995).
CN	Ericson, J. et al., "Sonic hedgehog induces the differentiation of ventral forebrain neurons: a common signal for ventral patterning within the neural tube", <i>Cell</i> <u>81</u> (5):747-756 (June 1995).
CO	Ettalaie, C. et al., "The effect of lipid peroxidation and lipolysis on the ability of lipoproteins to influence thromboplastin activity", <i>Biochim. Biophys. Acta.</i> <u>1257</u> (1):25-30 (June 1995).
CP	Fahmer, K. et al., "Transcription of <i>H-2</i> and <i>Qa</i> genes in embryonic and adult mice", <i>EMBO J.</i> <u>6</u> :1265-1271 (1987).
CQ	Fallon, J. F. et al., "FGF-2: Apical ectodermal ridge growth signal for chick limb development", <i>Science</i> <u>264</u> :104-107 (1994).
CR	Fan, C. et al., "Long-range sclerotome induction by sonic hedgehog: Direct role of the amino-terminal cleavage product and modulation by the cyclic AMP signaling pathway", <i>Cell</i> <u>81</u> :457-465 (5 May 1995).
CS	Fietz, M. et al., "The hedgehog gene family in <i>Drosophila</i> and vertebrate development", <i>Devel. (Suppl.)</i> :43-51 (1994).
CT	Forbes, A. J. et al., "Genetic analysis of <i>hedgehog</i> signaling in the <i>Drosophila</i> embryo", <i>Devel.</i> <u>119</u> (Suppl.):115-124 (1993).
CU	Francis, P. H. et al., "Bone morphogenetic proteins and a signaling pathway that controls patterning in the developing chick limb", <i>Devel.</i> <u>120</u> :209-218 (1994).
CV	Gallop, M. et al., "Applications of combinatorial technologies to drug discovery. 1. Background and peptide combinatorial libraries", <i>J. Med. Chem.</i> <u>37</u> (9):1233-1251 (1994).
CW	Gao, W. et al., "Neurotrophin-3 Rescues Experimental Cisplatin-induced Peripheral Sensory Neuropathy", <i>Ann. Neurol.</i> <u>38</u> (1): 30-37 (July 1995).
CX	Gérard, M. et al., "Structure and activity of regulatory elements involved in the activation of the <i>Hoxd-11</i> gene during late gastrulation", <i>EMBO J.</i> <u>12</u> :3539-3550 (1993).
CY	Gurdon, J. B., "The generation of diversity and pattern in animal development", <i>Cell</i> <u>68</u> :185-199 (1992).
CZ	Gustin, et al., "Characterization of the Role of Individual Protein Binding Motifs Within the Hepatitis B Virus Enhancer 1 on X Promoter Activity Using Linker Scanning Mutagenesis", <i>Virology</i> <u>193</u> : 653-660 (1993)
DA	Hall, T. et al., "A potential catalytic site revealed by the 1.7-Å crystal structure of the amino-terminal signaling domain of sonic hedgehog", <i>Nature</i> <u>378</u> (6553):212-216 (Nov 1995).

DB	Halpern, M. E. "Induction of Mutations in the Floor Plate is Distinguished by the Zebrafish no tail Mutation", <i>Cell</i> 75: 99-111 (1993).
DC	Hamburger, V. and H. L. Hamilton, "A series of normal stages in the development of the chick embryo", <i>J. Morph.</i> 88:49-92 (1951).
DD	Watters, F. et al.; "Cisplatin-induced Neuropathy in Mature Rats: Effects of the Melanocortin-derived Peptide ORG 2766", <i>Cancer Chemother. Pharmacol.</i> 32 : 162-166 (1993).
DE	Reimmann, M. et al., "The world according to hedgehog", <i>TIG</i> 13(1):14-21 (1997).
DF	Haramis, A. et al., "The limb deformity mutation disrupts the SHH/ FGF-4 feedback loop and regulation of 5' <i>HoxD</i> genes during limb pattern formation", <i>Devel.</i> 121(12):4161-4170 (Dec. 1995).
DG	Hardy, A. et al., "Gene expression, polarising activity and skeletal patterning in reaggregated hind limb mesenchyme", <i>Devel.</i> 121(12):4329-4337 (Dec. 1995).
DH	Harmon, C. S. et al., "Evidence that activation of protein kinase A inhibits human hair follicle growth and hair fibre production in organ culture and DNA synthesis in human and mouse hair follicle organ culture", <i>British J. Dermatol.</i> 136:853-858 (1997).
DI	Hatta, K. et al., "The cyclops mutation blocks specification of the floor plate of the zebrafish central nervous system", <i>Nature</i> 350:339-341 (1991).
DJ	Heberlein, U. et al., "The TGB $\beta$ homolog <i>dpp</i> and the segment polarity gene <i>hedgehog</i> are required for propagation of a morphogenetic wave in the <i>Drosophila</i> retina", <i>Cell</i> 75:913-926 (1993).
DK	Heemskerk, J. and S. DiNardo, " <i>Drosophila hedgehog</i> acts as a morphogen in cellular patterning", <i>Cell</i> 76:449-460 (1994).
DL	Hidalgo, A. and P. Ingham, "Cell patterning in the <i>Drosophila</i> segment: spatial regulation of the segment polarity gene <i>patched</i> ", <i>Devel.</i> 110:291-301 (1990).
DM	Hooper, J. and M. Scott, "The <i>Drosophila patched</i> gene encodes a putative membrane protein required for segmental patterning", <i>Cell</i> 59:751-765 (1989).
DN	Hynes, R. O., "Integrins: A family of cell surface receptors", <i>Cell</i> 48:549-554 (1987).
DO	Ingham, P. W., "Signaling by hedgehog family proteins in <i>Drosophila</i> and vertebrate development", <i>Curr. Opin. Genet. Dev.</i> 5(4):478-484 (Aug 1995).
DP	Ingham, P. W., "Hedgehog points the way", <i>Current Biology</i> 4(4):347-350 (1994).
DQ	Ingham, P. W., "Localized <i>Hedgehog</i> activity controls spatial limits of wingless transcription in the <i>Drosophila</i> embryo", <i>Nature</i> 366:560-562 (1993).
DR	Ingham, P. W. and A. Hidalgo, "Regulation of wingless transcription in the <i>Drosophila</i> embryo", <i>Devel.</i> 117:283-291 (1993).
DS	Ingham, P. W. et al., "Role of the <i>Drosophila patched</i> gene in positional signaling", <i>Nature</i> 353:184-187 (1991).
DT	Izpisua-Belmonte, J. -C. et al., "Expression of the homeobox <i>Hox-4</i> genes and the specification of position in chick wing development", <i>Nature</i> 350:585-589 (1991).
DU	Izpisua-Belmonte, J. -C. et al., "Expression of <i>Hox-4</i> genes in the chick wings links pattern formation to the epithelial-mesenchymal interaction that mediate growth", <i>EMBO J.</i> 11:1451-1457 (1992).
DV	Jiang, J. and G. Struhl, "Protein kinase A and hedgehog signaling in <i>Drosophila</i> limb development", <i>Cell</i> 80(4):563-572 (Feb. 1995).
DW	Jessel, T. M. and D. A. Melton, "Diffusible factors in vertebrate embryonic induction", <i>Cell</i> 68:257-270 (1992).
DX	Johnson, R. L. and C. Tabin, "The long and short of hedgehog signaling", <i>Cell</i> 81:313-315 (5 May 1995).
DY	Johnson, R. L. et al., "Patched overexpression alters wing disc size and pattern: transcriptional and post-transcriptional effects on hedgehog targets", <i>Devel.</i> 121(12):4237-4245 (Dec. 1995).
DZ	Johnson, R. L. et al., "Ectopic expression of sonic hedgehog alters dorsal-ventral patterning of somites", <i>Cell</i> 79(7):1165-1173 (Dec. 1994).

EA	Johnson, R. L. et al., "Mechanism of limb patterning", <i>Curr. Opin. Genet. Dev.</i> <u>4</u> (4):535 (Aug. 1994).
EB	Johnson, R. L. et al., "Sonic hedgehog: a key mediator of anterior-posterior patterning of the limb and dorso-ventral patterning of axial embryonic structures" <i>Biochem. Soc. Trans.</i> <u>22</u> (3):569-574 (Aug. 1994).
EC	Jones, M. et al., "Involvement of bone morphogenetic protein-4 (BMP-4) and Vgr-1 in morphogenesis and neurogenesis in the mouse", <i>Devel.</i> <u>111</u> :531-542 (1991).
ED	Randerson, D., "Morphogenetic signalling. Responses to hedgehog" <i>Curr. Biol.</i> <u>5</u> (6):580-582 (June 1995).
EE	Keonin, E., "A protein splice-junction motif in hedgehog family proteins", <i>Trends Biochem. Sci.</i> <u>20</u> (4):141-142 (April 1995).
EF	Kornblitt, A. R. et al., "Primary structure of human fibronectin: differential splicing may generate at least 10 polypeptides from a single gene", <i>EMBO J.</i> <u>4</u> :1755-1759 (1985).
EG	Kornfeld, R. and S. Kornfeld, "Assembly of asparagine-linked oligosaccharides", <i>Ann. Rev. Biochem.</i> <u>54</u> :631-664 (1985).
EH	Krauss, S. et al., "Expression of the zebrafish paired box gene <i>pax[zf-b]</i> during early neurogenesis", <i>Devel.</i> <u>113</u> :1193-1206 (1991).
EI	Krauss, S. et al., "A functionally conserved homolog of the Drosophila Segment polarity gene <i>hh</i> is expressed in tissues with polarizing activity in zebrafish embryos", <i>Cell</i> <u>75</u> :1431-1444 (1993).
EJ	Lai, C. et al., "Patterning of the neural ectoderm of <i>Xenopus laevis</i> by the amino-terminal product of hedgehog autoproteolytic cleavage", <i>Devel.</i> <u>121</u> :2349-2360 (1995).
EK	Laufer, E. et al., "Sonic hedgehog and <i>Fgf-4</i> act through a signaling cascade and feedback loop to integrate growth and patterning of the developing limb bud", <i>Cell</i> <u>79</u> :993-1003 (16 Dec. 1994).
EL	Lee, J. J. et al., "Secretion and localized transcription suggest a role in positional signaling for products of the segmentation gene <i>hedgehog</i> ", <i>Cell</i> <u>71</u> :33-50 (1992).
EM	Lee, J. J. et al., "Autoproteolysis in hedgehog protein biogenesis", <i>Science</i> <u>266</u> (5190):1528-1537 (Dec. 1994).
EN	Lee, S. J. "Expression of growth/differentiation factor 1 in the nervous system: Conservation of a bicistronic structure", <i>Proc. Natl. Acad. Sci. USA</i> <u>88</u> :4250-4254 (Year).
EO	Levin, M. et al., "A molecular pathway determining left-right asymmetry in chick embryogenesis", <i>Cell</i> <u>82</u> (5):803-814 (Sept. 8, 1995).
EP	Li, W. et al., "Function of protein kinase A in hedgehog signal transduction and drosophila imaginal disc development", <i>Cell</i> <u>80</u> (4):553-562 (Feb. 1995).
EQ	Lipton, R. et al., "Taxol Produces a Predominantly Sensory Neuropathy", <i>Neurology</i> <u>39</u> : 368-373; (March, 1989).
ER	Lopez-Martinez, A. et al., "Limb-patterning activity and restricted posterior localization of the amino-terminal product of sonic hedgehog cleavage", <i>Curr. Biol.</i> <u>5</u> (7):791-796 (July 1995).
ES	Lumsden, A. and A. Graham, "Neural patterning: A forward role for hedgehog", <i>Curr. Biol.</i> <u>5</u> (12):1347-1350 (Dec. 1995).
ET	Ma, C. et al., "Molecular cloning and characterization of rKlk10, a cDNA encoding T-kininogenase from rat submandibular gland and kidney", <i>Biochem.</i> <u>31</u> (44):10922-10928 (1992).
EU	Ma, C. et al., "The segment polarity gene <i>hedgehog</i> is required for the progression of the morphogenetic furrow in the developing Drosophila eye", <i>Cell</i> <u>75</u> :927-938 (1993).
EV	Ma, C. and K. Moses, " <i>Wingless</i> and <i>patched</i> are negative regulators of the morphogenetic furrow and can affect tissue polarity in the developing Drosophila compound eye", <i>Devel.</i> <u>121</u> (8):2279-2289 (Aug. 1995).
EW	Marigo, V. et al., "Biochemical evidence that <i>patched</i> is the hedgehog receptor", <i>Nature</i> <u>384</u> :176-179 (1996).
EX	Maccabe, J. A. and B. W. Parker, "The target tissue of limb-bud polarizing activity in the induction of supernumerary structures", <i>J. Embryol. Exp. Morph.</i> <u>53</u> :67-73 (1979).
EY	Maiese, K. et al., "Protein kinases modulate the sensitivity of hippocampal neurons to nitric oxide toxicity and anoxia", <i>J. Neurosci. Res.</i> <u>36</u> :77-87 (1993).

WJ	EZ	Marti, E. et al., "Distribution of <i>Sonic hedgehog</i> peptides in the developing chick and mouse embryo", <i>Devel.</i> <u>121</u> (8):2537-2547 (Aug. 1995).
	FA	Marti, E. et al., "Requirement of 19K form of <i>Sonic hedgehog</i> for induction of distinct ventral cell types in CNS explants", <i>Nature</i> <u>375</u> (6529):322-325 (May 1995).
	FB	Matise, M. et al., "Gli2 is Required for Induction of Floor Plate and Adjacent Cells, But Not Most Ventral Neurons in the Mouse Central Nervous System", <i>Development</i> <u>125</u> : 2759-2770 (1998).
	FC	Mazullo, F. et al., "Activation of four homeobox gene clusters in human embryonal carcinoma cells induced to differentiate by retinoic acid", <i>Differentiation</i> <u>37</u> :73-79 (1988).
	FD	McGinnis, W. and R. Krumlauf, "Homeobox genes and axial patterning", <i>Cell</i> <u>68</u> :283-302 (1992).
	FE	Mohler, J., "Requirements for <i>hedgehog</i> , a segmental polarity gene, in patterning larval and adult cuticle of <i>Drosophila</i> ", <i>Genetics</i> <u>120</u> :1061-1072 (1988).
	FF	Mohler, J. and K. Vani, "Molecular organization and embryonic expression of the <i>hedgehog</i> gene involved in cell-cell communication in segmental patterning of <i>Drosophila</i> ", <i>Devel.</i> <u>115</u> :957-971 (1992).
	FG	Morgan, B. A. et al., "Targeted misexpression of <i>Hox-4.6</i> in the avian limb bud causes apparent homeotic transformations", <i>Nature</i> <u>358</u> :236-239 (1992).
	FH	Mollman, J., "Cisplatin Neurotoxicity", <i>The New England Journal of Medicine</i> , <u>322</u> (2): 126-127 (Jan. 11, 1990).
	FI	Nakano, Y. et al., "A protein with several possible membrane-spanning domains encoded by the <i>Drosophila</i> segment polarity gene <i>patched</i> ", <i>Nature</i> <u>341</u> :508-513 (1989).
	FJ	Ngo, J. et al., "Computational Complexity Protein", Merz and LeGrand, ed. @ Birkhouse Boston (1994).
	FK	Niswander, L. and G. R. Martin, "FGF-4 and BMP-2 have opposite effects on limb growth", <i>Nature</i> <u>361</u> :68-71(1993).
	FL	Niswander, L. et al., "A positive feedback loop coordinates growth and patterning in the vertebrate limb", <i>Nature</i> , <u>371</u> :609-612 (13 October 1994).
	FM	Nohno, T. et al., "Involvement of the <i>Chox-4</i> Chicken Homeobox Genes in Determination of Anteroposterior Axial Polarity during Limb Development", <i>Cell</i> , Vol. <u>64</u> : 1197- 1205 (March 22, 1991).
	FN	Nohno, T. et al., "Involvement of the <i>Sonic hedgehog</i> gene in chick feather formation", <i>Biochem. Biophys. Res. Comm.</i> <u>206</u> (1): 33-39 (Jan. 1995).
	FO	O'Farrell, P. H., "Unanimity waits in the wings", <i>Nature</i> <u>368</u> :188-189 (1994).
	FP	Parisi, M. J. et al., "The role of the <i>hedgehog/patched</i> signaling pathway in epithelial stem cell proliferation: From fly to human", <i>Cell Res.</i> <u>8</u> :15-21 (1998).
	FQ	Parr, B. A. et al., "Mouse Wnt genes exhibit discrete domains of expression in the early embryonic CNS and limb buds", <i>Development</i> <u>119</u> :247-261 (1993).
	FR	Patel, N. H. et al., "The role of segment polarity genes during <i>Drosophila</i> neurogenesis", <i>Genes &amp; Devel.</i> <u>3</u> :890-904 (1989).
	FS	Peifer, M., "The two faces of <i>hedgehog</i> ", <i>Science</i> <u>266</u> (5190):1492-1493 (Dec. 1994).
	FT	Perrimon, N. et al., "Generating lineage-specific markers to study <i>Drosophila</i> development", <i>Develop. Genet.</i> , <u>12</u> :238-252 (1991).
	FU	Perrimon, N., "Hedgehog and beyond", <i>Cell</i> <u>80</u> :517-520 (24 Feb. 1995).
	FV	Pham, A. et al., "The Suppressor of <i>fused</i> gene encodes a novel PEST protein involved in <i>Drosophila</i> segment polarity establishment" <i>Genetics</i> <u>140</u> (2):587-598 (June 1995).
	FW	Phillis, J. W. and M. H. O'Regan, "Mechanisms of glutamate and aspartate release in the ischemic rat cerebral cortex", <i>Brain Res.</i> <u>730</u> :150-164 (1996).
V	FX	Placzek, M. et al., "Induction of floor plate differentiation by contact-dependent, homeogenetic signals", <i>Development</i> <u>117</u> : 205-218 (1993).

WJ	FY	Placzek, M. et al., "Orientation of Commissural Axons <i>in vitro</i> in response to a floor plate derived chemoattractant", <i>Develop.</i> <b>110</b> :19-30 (1990).
	FZ	Pollock, R. A. et al., "Altering the boundaries of <i>Hox3.1</i> expression: Evidence for antipodal gene regulation", <i>Cell</i> <b>71</b> :911-923 (1992).
	GA	Porter, J. et al., "The product of hedgehog autoproteolytic cleavage active in local and long-range signalling", <i>Nature</i> <b>374</b> (6520):363-366 (23 March 1995).
	GB	Rebeck, et al., "'Homology' in proteins and nucleic acids: A terminology muddle and a way out of it", <i>Cell</i> <b>50</b> :667 (28 Aug. 1987).
	GC	Rennie, J., "Super Sonic", <i>Sci. Amer.</i> p.20, (April 1994).
	GD	Riddle, R. D. et al. "Induction of the LIM homeobox gene <i>Lmx1</i> by WNT7a establishes dorsoventral pattern in the vertebrate limb", <i>Cell</i> <b>83</b> :631-640 (17 Nov. 1995).
	GE	Riddle, R. et al.; "Sonic Hedgehog Mediates the Polarizing Activity of the ZPA", <i>Cell</i> , <b>75</b> :1401-1416 (December 31, 1993).
	GF	Riley, B. B. et al., "Retroviral expression of FGF-2 (bFGF) affects patterning in chick limb bud", <i>Develop.</i> <b>118</b> :95-104 (1993).
	GG	Roberts, D. et al., "Sonic hedgehog is an endodermal signal inducing <i>Bmp-4</i> and <i>Hox</i> genes during induction and regionalization of the chick hindgut", <i>Develop.</i> <b>121</b> (10):3163-3174 (Oct. 1995).
	GH	Roelink, H. et al., "Floor plate and motor neuron induction <i>vhh-1</i> , a vertebrate homolog of hedgehog expressed by the notochord", <i>Cell</i> <b>76</b> :761-775 (25 Feb. 1994).
	GI	Roelink, H. et al.; "Floor Plate and Motor Neuron Induction By Different Concentrations of the Amino-Terminal Cleavage Product of Sonic Hedgehog Autoproteolysis", <i>Cell</i> , <b>81</b> : 445-455 (May 5, 1995).
	GJ	Sachiko, I. et al., "Sonic hedgehog is expressed in epithelial cells during development of whisker, hair and tooth", <i>Biochem. Biophys. Res. Commun.</i> <b>218</b> :688-693 (1996).
	GK	Satoh, S. et al., "Neuroprotective properties of a protein kinase inhibitor against ischaemia-induced neuronal damage in rats and gerbils", <i>Br. J. Pharmacol.</i> <b>118</b> :1592-1596 (1996).
	GL	St. Jacques, B. et al., "Sonic hedgehog signaling is essential for hair development", <i>Curr. Biol.</i> <b>8</b> :1058-1068 (1998).
	GM	Sasaki, H. and B. L. M. Hogan, "Differential expression of multiple fork head related genes during gastrulation and axial pattern formation in the mouse embryo", <i>Develop.</i> <b>118</b> :47-59 (1993).
	GN	Savage, M. et al., "Distribution of FGF- 2 suggests it has a role in chick limb bud growth", <i>Devel. Dynamics</i> <b>198</b> :159-170 (1993).
	GO	Schuske, K. et al., " <i>Patched</i> overexpression causes loss of <i>wingless</i> expression in drosophila embryos", <i>Devel. Biol.</i> <b>164</b> : 300- 311 (1994).
	GP	Smith, J. C., "Hedgehog, the floor plate, and the zone of polarizing activity", <i>Cell</i> <b>76</b> :193-196 (1994).
	GQ	Stachel, S. E. et al., "Lithium perturbation and gooseoid expression identify a dorsal specification pathway in the pregastrula zebrafish", <i>Develop.</i> <b>117</b> :1261-1274 (1993).
	GR	Stolow, M. and Shi, Y., "Xenopus sonic hedgehog as a potential morphogen during embryogenesis and thyroid hormone-dependent metamorphosis", <i>Nucl. Acids Res.</i> <b>23</b> (13):2555-2562 (1995).
	GS	Tabata, T. and T. B. Komberg, "Hedgehog is a signaling protein with a key role in patterning drosophila imaginal discs", <i>Cell</i> <b>76</b> : 89-102 (1994).
	GT	Tabata, T. et al., "The <i>Drosophila hedgehog</i> gene is expressed specifically in posterior compartment cells and is a target of engrail d regulation", <i>Genes &amp; Develop.</i> <b>6</b> :2635-2645 (1992).
	GU	Tabin, C. J., "Retinoids homeoboxes, and growth factors: Toward molecular models for limb development", <i>Cell</i> <b>66</b> :199-217 (26 July 1991).
	GV	Tanabe, Y. et al., "Induction of motor neurons by sonic hedgehog is independent of floor plate differentiation", <i>Curr. Biol.</i> <b>5</b> (6):651-658 (June 1995).
✓	GW	Tanaka, E. and A. Gann, "Limb development : The budding role of FGF", <i>Curr. Biol.</i> <b>5</b> (6):594- 597 (June 1995).



GX	Tashiro, S. et al., "Structure and expression of <i>hedgehog</i> , a <i>Drosophila</i> segment-polarity gene required for cell-cell communication", <i>Gene</i> <u>124</u> :183-189 (1993).
GZ	Taylor, A. M. et al., "Contrasting distributions of <i>patched</i> and <i>hedgehog</i> proteins in the <i>Drosophila</i> embryo", <i>Mech. Develop.</i> <u>42</u> : 89-96 (1993).
GZ	Shaller, C. and G. Eichele, "Identification and spatial distribution of retinoids in the developing chick limb bud", <i>Nature</i> <u>327</u> : 625-628 (1987).
HA	Mummel, et al., "Vectors for <i>Drosophila</i> P-element-mediated transformation and tissue culture transfection", <i>Gene</i> <u>74</u> :445-456 (1988).
HB	Tickle, C. et al., "A quantitative analysis of the effect of all-trans-retinoic acid on the pattern of chick wing development", <i>Develop. Biol.</i> <u>109</u> :82-95 (1985).
HC	Tickle, C. et al., "Vertebrate limb development", <i>Curr. Opin. Genet. Dev.</i> <u>5</u> (4):478-484 (1995).
HD	Tickle, C. and G. Eichele, "Vertebrate limb development", <i>Ann. Rev. Cell Biol.</i> <u>10</u> :121-152(1994).
HE	Tilson, H. et al., "Neurobehavioral Techniques to Assess the Effects of Chemicals on Nervous System", <i>Ann. Rev. Pharmacol. Toxicol.</i> <u>24</u> : 425-450 (1984).
HF	Traiffort, E. et al., "Regional Distribution of Sonic Hedgehog, Patched, and Smoothened mRNA in the Adult Rat Brain", <i>Journal of Neurochemistry</i> <u>70</u> (3): 1327-1330 (1998).
HG	Van Straaten, H. W. M. et al., "Effect of the notochord on the differentiation of a floor plate area in the neural tube of the chick embryo", <i>Anat. Embryol.</i> <u>177</u> :317-324 (1988).
HH	Vogel, A. and C. Tickle, "FGF-4 maintains polarizing activity of posterior limb bud cells <i>in vivo</i> and <i>in vitro</i> ", <i>Develop.</i> <u>119</u> :199- 206 (1993).
HI	Wallace, et al., "Oligonucleotide probes for the screening of recombinant DNA libraries", <i>Methods in Enzymol.</i> <u>152</u> :432-443 (1987).
HJ	Wanek, N. et al., "Conversion by retinoic acid of anterior cells into ZPA cells in the chick wing bud", <i>Nature</i> <u>350</u> :81-83 (7 March 1991).
HK	Yamada, T. et al., "Control of cell pattern in the developing nervous system: Polarizing activity of the floor plate and notochord", <i>Cell</i> , <u>64</u> :635-647, (8 Feb. 1991).
HL	Yang, Y. and L. Niswander, "Interaction between the signaling molecules WNT27a and SHH during vertebrate limb development: dorsal signals regulate anteroposterior patterning", <i>Cell</i> <u>80</u> :939-947 (24 March 1995).
HM	Yun-Bo Shi, "Cell-cell and cell ECM interactions in epithelial apoptosis and cell renewal during frog intestinal development", <i>Cell Biochem. Biophys.</i> <u>27</u> :179-202 (1995).
HN	Zappavigna, et al., " <i>Hox4</i> genes encode transcription factors with potential auto- and cross-regulatory capacities", <i>EMBO J.</i> <u>10</u> (13):4177-4187 (1991).
HO	Zardoya, et al., "Evolution and orthology of hedgehog genes", <i>TIG</i> <u>12</u> (12):496-497 (1996)
HP	Zecca, M. et al., "Sequential organizing activities of <i>engrailed</i> , <i>hedgehog</i> and <i>decapentaplegic</i> in the <i>Drosophila</i> wing", <i>Dev.</i> <u>121</u> :2265-2278 (Aug. 1995).

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